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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,134	02/22/2000	ROLAND HETTRICH	P991135	1794
29177	7590	01/15/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			DHARIA, PRABODH M	
			ART UNIT	PAPER NUMBER
			2673	17

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/486,134

Applicant(s)

HETTRICH ET AL.

Examiner

Prabodh M Dharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. **Status:** Receipt is acknowledged of papers 12-01-2003 submitted under request for reconsideration, which have been placed of record in the file. Claims 7-18 are pending in this action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7,8,12, 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaughlin et al. (5,739,809) in view of Silverbrook (6,002,385).

Regarding claim 7, McLaughlin et al. teaches an apparatus having a readjustment mechanism (Col. 4, Line 58 to Col. 5, Line 32, Col. 6, Line 60 to Col. 7, Line 11) for readjusting at least one operating parameter (Col. 7, Lines 1-11) of the apparatus, the apparatus comprising: a memory (figure 1, Col. 4, Lines 58-60); means for storing an average value of a parameter value adjustment interval in the memory (Col. 3, Lines 34-40), the parameter value adjustment interval having an interval width, the average value and the interval width defining a range of possible adjustment values for said parameter (Col. 3, Lines 42-49); and means for overwriting the stored average value of the parameter value adjustment interval with a momentary value of the operating parameter (Col. 3, Lines 42-45) wherein, following a renewed readout of the stored

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average value of the parameter value, adjustment interval, the momentary value of the operating parameter defines a position of the parameter value adjustment interval (Col. 8, Lines 12-30).

However, McLaughlin et al. fails to teach average value of a value interval.

However, Silverbrook teaches average value of a value interval (Col. 11, Lines 44-67).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Silverbrook in McLaughlin et al. teaching for maintaining a good display image by manipulating image and data using computation to have high resolution discrete level display.

Regarding claim 8, McLaughlin et al. teaches a factory set (factory calibrated, usually stored in the memory per manufacturer model) average value (Col. 3, Lines 34-36, Col. 6, Lines 44-48) for the parameter value adjustment interval is additionally stored (Col. 3, Lines 42-44) and wherein the factory set average value of the parameter value adjustment interval can be written over the momentary value of the operating parameter such that, following a renewed readout of the stored average value (Col. 3, Lines 42-45) of the value interval (Col. 3, Lines 42-45), the factory set average value defines the position of the parameter value adjustment interval (Col. 3, lines 42-45).

Regarding Claim 12, McLaughlin et al. teaches when the apparatus is turned off, the stored averages are overwritten with momentary values of corresponding operating parameters such that the values are read out as new averages when the apparatus is turned back on (Col. 8, Lines 12-30).

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Regarding Claim 13, McLaughlin et al. teaches a method for readjusting at least one operating parameter of an apparatus (Col. 4, Line 58 to Col. 5, Line 32, Col. 6, Line 60 to Col. 7, Line 11), the method comprising the steps of: storing an average value of a parameter value adjustment interval in a memory of the apparatus (Col. 3, Lines 34-45, Col. 8, Lines 12-25), the adjustment interval defining a range of potential adjustment values for said parameter (Col. 8, Lines 12-25, Col. 14, Lines 1-17); overwriting the stored average value of the parameter value adjustment interval with a momentary value of the operating parameter (Col. 8, Lines 12-25); and defining a position of the parameter value adjustment interval by the momentary value of the operating parameter following a renewed readout of the stored average value of the operating parameter (Col. 8, Lines 12-30, Col. 14, Lines 1-29, Lines 42-50). It is well known to one in ordinary skill in the art an apparatus with Micro-processor with software to calibrate, does calculate the operating parameter average value of a value interval. (Col. 3, Lines 5-15).

However, McLaughlin et al. fails to teach average value of a value interval.

However, Silverbrook teaches average value of a value interval (Col. 11, Lines 44-67).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Silverbrook in McLaughlin et al. teaching for maintaining a good display image by manipulating image and data using computation to have high resolution discrete level display.

4. Claims 9-11, 14-18, are rejected under 35 U.S.C. 103(a) as being unpatentable over McLaughlin et al. (5,739,809) in view of Trundle (TV and Video Technology pages 117-121).

Regarding Claims 9, McLaughlin et al. teaches an apparatus having a readjustment mechanism (Col. 4, Line 58 to Col. 5, Line 32, Col. 6, Line 60 to Col. 7, Line 11) for readjusting at least one operating parameter (Col. 7, Lines 1-11) of the apparatus, the apparatus comprising: a memory (figure 1, Col. 4, Lines 58-60); means for storing an average value of a parameter value adjustment interval in the memory (Col. 3, Lines 34-40), the parameter value adjustment interval having an interval width, the average value and the interval width defining a range of possible adjustment values for said parameter (Col. 3, Lines 42-49); and means for overwriting the stored average value of the parameter value adjustment interval with a momentary value of the operating parameter (Col. 3, Lines 42-45) wherein, following a renewed readout of the stored average value of the parameter value, adjustment interval, the momentary value of the operating parameter defines a position of the parameter value adjustment interval (Col. 8, Lines 12-30).

However, McLaughlin et al. modified by Silverbrook fails to teach operating parameter is a supply voltage of a display device of the apparatus.

However Trundle does teach about operating parameter is a supply voltage (page 119, Lines 24,25) of a display device of the apparatus (figure 8.10, page 117, paragraph 4, Lines 1,2).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Trundle in McLaughlin et al. modified by Silverbrook teaching for maintaining a good display image with environmental changes and aging of the apparatus.

Regarding Claims 10,11, McLaughlin et al. teaches an apparatus having a readjustment mechanism (Col. 4, Line 58 to Col. 5, Line 32, Col. 6, Line 60 to Col. 7, Line 11) for readjusting

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at least one operating parameter (Col. 7, Lines 1-11) of the apparatus, the apparatus comprising: a memory (figure 1, Col. 4, Lines 58-60); means for storing an average value of a parameter value adjustment interval in the memory (Col. 3, Lines 34-40), the parameter value adjustment interval having an interval width, the average value and the interval width defining a range of possible adjustment values for said parameter (Col. 3, Lines 42-49); and means for overwriting the stored average value of the parameter value adjustment interval with a momentary value of the operating parameter (Col. 3, Lines 42-45) wherein, following a renewed readout of the stored average value of the parameter value, adjustment interval, the momentary value of the operating parameter defines a position of the parameter value adjustment interval (Col. 8, Lines 12-30).

However, McLaughlin et al. modified by Silverbrook fails to teach a display device, although Yamamoto modified by Curt et al. fails to teach about a test image to be displayed on the display during the readjustment, wherein the influence of the readjustment of the supply voltage of the display device can be observed by a user during the readjustment and the test image shows areas of different colors during the readjustment, where chromatic values are modified by the readjustment.

However Trundle does teach a test image to be displayed on the display during the readjustment, wherein the influence of the readjustment of the supply voltage (page 119, Lines 24-28) of the display device can be observed by a user during the readjustment and the test image shows areas of different colors during the readjustment, where chromatic values are modified by the readjustment (figure 8.10, page 117, paragraph 4, Lines 1,2, page 119, Lines 24-28).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention

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was made to incorporate the teaching of Trundle in McLaughlin et al. modified by Silverbrook teaching for maintaining a good display image with environmental changes and aging of the apparatus.

Regarding Claim 14, McLaughlin et al. teaches a factory set (factory calibrated, usually stored in the memory per manufacturer model) average value over writing the stored average with the average set at the factory; and defining the position of the value interval by the average set at the factory following a renewed readout of the stored averages (Col. 3, Lines 34-36, Col. 6, Lines 44-48).

Regarding Claim 15, McLaughlin et al. teaches an apparatus having a readjustment mechanism (Col. 4, Line 58 to Col. 5, Line 32, Col. 6, Line 60 to Col. 7, Line 11) for readjusting at least one operating parameter (Col. 7, Lines 1-11) of the apparatus, the apparatus comprising: a memory (figure 1, Col. 4, Lines 58-60); means for storing an average value of a parameter value adjustment interval in the memory (Col. 3, Lines 34-40), the parameter value adjustment interval having an interval width, the average value and the interval width defining a range of possible adjustment values for said parameter (Col. 3, Lines 42-49); and means for overwriting the stored average value of the parameter value adjustment interval with a momentary value of the operating parameter (Col. 3, Lines 42-45) wherein, following a renewed readout of the stored average value of the parameter value, adjustment interval, the momentary value of the operating parameter defines a position of the parameter value adjustment interval (Col. 8, Lines 12-30).

However, McLaughlin et al. modified by Silverbrook fails to teach operating parameter is a supply voltage of a display device of the apparatus.

However Trundle does teach the operating parameter is a supply voltage of a display device of the apparatus (page 119, Lines 24-28),

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Trundle in McLaughlin et al. modified by Silverbrook teaching for maintaining a good display image with environmental changes and aging of the apparatus.

Regarding Claims 16,17, McLaughlin et al. teaches an apparatus having a readjustment mechanism (Col. 4, Line 58 to Col. 5, Line 32, Col. 6, Line 60 to Col. 7, Line 11) for readjusting at least one operating parameter (Col. 7, Lines 1-11) of the apparatus, the apparatus comprising: a memory (figure 1, Col. 4, Lines 58-60); means for storing an average value of a parameter value adjustment interval in the memory (Col. 3, Lines 34-40), the parameter value adjustment interval having an interval width, the average value and the interval width defining a range of possible adjustment values for said parameter (Col. 3, Lines 42-49); and means for overwriting the stored average value of the parameter value adjustment interval with a momentary value of the operating parameter (Col. 3, Lines 42-45) wherein, following a renewed readout of the stored average value of the parameter value, adjustment interval, the momentary value of the operating parameter defines a position of the parameter value adjustment interval (Col. 8, Lines 12-30).

However, McLaughlin et al. modified by Silverbrook fails to teach a test image to be displayed on the display during the readjustment, wherein the influence of the readjustment of the supply voltage of the display device can be observed by a user during the readjustment and the test image shows areas of different colors during the readjustment, where chromatic values are modified by the

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Readjustment.

However Trundle does teach a test image to be displayed on the display during the readjustment, wherein the influence of the readjustment of the supply voltage of the display device can be observed by a user during the readjustment and the test image shows areas of different colors during the readjustment, where chromatic values are modified by the readjustment (figure 8.10, page 117, paragraph 4, Lines 1,2, page 119, Lines 24-28).

Thus it would have been obvious to one in ordinary skill in the art at the time of invention was made to incorporate the teaching of Trundle in McLaughlin et al. modified by Silverbrook teaching for maintaining a good display image with environmental changes and aging of the apparatus.

Regarding Claim 18, McLaughlin et al. teaches when the apparatus is turned off, the stored averages are overwritten with momentary values of corresponding operating parameters such that the values are read out as new averages when the apparatus is turned back on (Col. 8, lines 12-30).

Response to Arguments

5. Applicant's arguments filed 12-01-2003 have been fully considered but they are not persuasive.

Applicant argues the references cited do not teach a means for storing an average value parameter value adjustment interval wherein the average value of the interval and the interval width define the range of possible adjustment values for the parameter, and wherein after, a

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renewed readout of the stored average value of the adjustment interval, the momentary value (i.e. the newly stored value written over the previous value) defines a position of the parameter value adjustment interval.

Examiner disagrees, as applicant's argument is moot because of new ground of rejection.

Applicant argues Yamamoto does not teach a limited range of adjustment centered around the chosen loaded density value.

Examiner argues claim 7 or claim 13 do not recite "a limited range of adjustment centered around the chosen loaded density value".

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is informed that all of the other additional cited references anticipate the claimed material and render the claims obvious.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Oshino et al. (6,628,820 B2) Image forming method and apparatus.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh Dharia whose telephone number is (703) 605-1231. The examiner can normally be reached Monday- Friday from 8:00 AM to 5:00 PM.

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If attempts to reach examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938. The fax number of the group is (703) 308-6606.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4750.

Any response to this action should be mailed to:

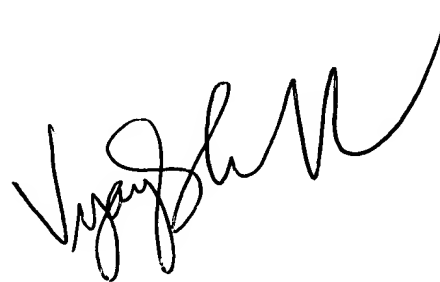
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PD

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01-10-2004

A handwritten signature in black ink, appearing to read 'Vijay Shankar', written in a cursive style.

**VIJAY SHANKAR
PRIMARY EXAMINER**